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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--------------------------|-------------------------------------|----------------------|---------------------|------------------|
| 10/598,727 | 09/08/2006 | Gert Herrn Wagener | P30307 | 9436 |
| | 7590 05/28/200 & BERNSTEIN, P.L. | EXAMINER | | |
| 1950 ROLAND CLARKE PLACE | | | VANATTA, AMY B | |
| RESTON, VA 20191 | | | ART UNIT | PAPER NUMBER |
| | | | 3765 | |
| | | | | |
| | | | NOTIFICATION DATE | DELIVERY MODE |
| | | | 05/28/2009 | ELECTRONIC |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

gbpatent@gbpatent.com pto@gbpatent.com

| | Application No. | Applicant(s) | | | | |
|--|--|---|--|--|--|--|
| Office Action Occurrence | 10/598,727 | WAGENER, GERT HERRN | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Amy B. Vanatta | 3765 | | | | |
| The MAILING DATE of this communication app Period for Reply | ears on the cover sheet with the c | orrespondence address | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be time will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | lely filed the mailing date of this communication. (35 U.S.C. § 133). | | | | |
| Status | | | | | | |
| 1) Responsive to communication(s) filed on 17 Fe | ebruarv 2009. | | | | | |
| ·= · · · · · · · · · · · · · · · · · · | action is non-final. | | | | | |
| <i>,</i> — | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | |
| | closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | |
| Disposition of Claims | | | | | | |
| 4)⊠ Claim(s) <u>1-3</u> is/are pending in the application. | | | | | | |
| | 4a) Of the above claim(s) <u>1 and 2</u> is/are withdrawn from consideration. | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | |
| 6)⊠ Claim(s) <u>3</u> is/are rejected. | · | | | | | |
| 7) Claim(s) is/are objected to. | | | | | | |
| 8) Claim(s) are subject to restriction and/or | election requirement. | | | | | |
| Application Papers | | | | | | |
| 9)☐ The specification is objected to by the Examine | • | | | | | |
| | 10)⊠ The drawing(s) filed on <u>08 September 2006</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner. | | | | | |
| Applicant may not request that any objection to the o | | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | | |
| a) All b) Some * c) None of: | | | | | | |
| ·— ·— | 1. Certified copies of the priority documents have been received. | | | | | |
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| application from the International Bureau (PCT Rule 17.2(a)). | | | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
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| Attachmont/s) | | | | | | |
| Attachment(s) 1) X Notice of References Cited (PTO-892) | 4) Interview Summary | (PTO-413) | | | | |
| 2) Notice of Traftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Da | ite | | | | |
| 3) Information Disclosure Statement(s) (PTO/SB/08) | | | | | | |
| Paper No(s)/Mail Date 6) U Other: | | | | | | |

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DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group III in the reply filed on 2/17/09 is acknowledged.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claim 3 is rejected under 35 U.S.C. 102(e) as being anticipated by Bompard et al (US 6,585,842).

Bompard et al disclose a method for producing a multiaxial complex of multifilament threads formed of continuous filaments as claimed (col. 3, lines 53-63; col.

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8, lines 21 and 30-36; col. 10, lines 50-51). The method includes placing multifilament threads on top of one another in different orientations (see Fig. 6A; col. 3, lines 58-63; and col. 11, lines 34-43). The upper and low sheets of threads, 30c and 30b as shown in Fig. 6A, are angled, while the middle sheet of threads 30a has threads running in a production direction, at 0°, as claimed. Thus, the 0° layer (30a) is laid in between the layers (30b,30c) which have different orientations, as claimed (col. 11, lines 34-43 and col. 12, lines 2-6).

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A step of guiding the multifilament threads of the 0° layer (30a) over press rollers (36) before being laid down on a previous multifilament layer (30b) is performed; see Fig. 1. Bompard discloses that the 0° layer (30a) is obtained by the method depicted in Fig. 1 (see, e.g., col. 11, lines 37-39) prior to assembling between angled layers 30b,30c. As shown in Fig. 1, the sheet of threads is guided over press rollers 36. The rollers 36 cause the multifilament threads to be spread apart, to the extent recited in claim 3, since the rollers 36 press against each other to distribute the liquid compound over the fibers, which stabilizes the fibers in their spread orientation (col. 9, lines 44-51). The layers (30a,30b,30c) are fed to a sewing device after layering, to bond the layers into the multiaxial complex (col. 7, lines 9-10; col. 17, lines 35-44; and see stitching device 120 in Fig. 17). The threads of the 0° layer are fed from rollers 36 without any torsion, and thus the rollers feed these threads to sewing without any torsion, to the extent recited in claim 3.

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Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gruenert et al (US 6,151,923) in view of Bompard et al (US 6,585,842).

Gruenert et al disclose a method for producing a multiaxial complex of threads formed (see, e.g., col. 4, lines 46-48). The method includes placing multifilament threads on top of one another in different orientations (see Fig. 2; col. 5, lines 23-31 and 52-67). The upper and low sheets of threads (51) as shown in Fig. 2 lie diagonally, while the middle sheet of threads 52 has threads running in a production direction, at 0°, as claimed (col. 5, lines 64-67). Thus, the 0° layer (52) is laid in between the layers which have different orientations, as claimed (see Fig. 2).

A step of guiding the multifilament threads of the 0° layer (52) over press rollers before being laid down on a previous multifilament layer (51) appears to be shown in Fig. 2. See the pair of rollers (unnumbered in Fig. 2) which are just above the yarn guide, for yarns 52 (see yarn guide 83 in Fig. 2). Since the yarns 52 remain spread by the yarn guide as they are laid upon layer 51, it would appear that the rollers cause the threads to be spread apart, to the extent recited in claim 3, and feed the threads downstream without any torsion, as claimed. The threads are fed to a knitting site 1, which forms "sewing" to the extent recited in claim 3 (see device 1 shown in Fig. 1).

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Thus, Gruenert et al discloses the steps of the claimed method, however the threads (yarns 51,52) are not disclosed as being multifilament and continuous. Threads used in multiaxial complexes are commonly multifilament threads of continuous filaments, such as disclosed by Bompard et al. Bompard et al disclose a method of producing a multiaxial complex of multifilament threads formed of continuous filaments (col. 3, lines 53-63; col. 8, lines 21 and 30-36; col. 10, lines 50-51). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use multifilament threads of continuous filaments as the yarns in the method of Gruenert, since multiaxial complexes are conventionally formed out of such threads, as disclosed by Bompard, in order to produce a product having specific desired end properties such as strength.

Conclusion

- 6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- 7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amy B. Vanatta whose telephone number is 571-272-4995. The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Welch can be reached on 571-272-4996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Amy B Vanatta/ Primary Examiner Art Unit 3765